

right ankle, knee, shoulder and more recently, her left wrist. Physical examination on admission was unremarkable apart from the presence of a left wrist effusion, with associated warmth, erythema and tenderness causing limited extension and flexion. She was initially treated with amoxicillin but this was changed to augmentin following the culture report of the aspirated fluid from her left wrist, which revealed a beta lactamase producing gonococcus, penicillin resistant and sensitive to augmentin.

She attended (as a self-referral and not referred by the orthopaedic department) at our Genitourinary Medicine Clinic three days following her discharge from the hospital. She was complaining of yellow/greenish vaginal discharge.

She admitted to having two sexual partners, one of whom was a casual contact whilst in Jamaica four weeks prior to her admission. The other was a regular male partner for the past three years with whom she had unprotected sex two weeks prior to her presentation in the Genitourinary Medicine Clinic. The regular boyfriend attended the Department of GU Medicine in Coventry with her. He was complaining of recurrent penile discharge of ten days duration. He was subsequently found to have a penicillin resistant gonococcal urethritis and he was treated with spectinomycin. In addition, both the patient and her

regular partner were found to have chlamydia. They were both treated for this with a course of tetracycline. The female partner did not show any evidence of gonococcal infection during her attendance at our clinic. This was because she had received anti-gonococcal treatment prior to her presentation at this clinic. The patient's regular partner had also had a casual contact in the United Kingdom, who attended a GUM Clinic elsewhere and was found to have a penicillin resistant gonococcal infection.

This case serves to demonstrate an unusual occurrence, the disseminated infection due to penicillin resistant gonorrhoea. In addition, it demonstrates how colleagues in other specialities are still unaware or reluctant to refer patients to genitourinary medicine clinics with sexually transmitted diseases.

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Single dose trimethoprim-sulphamethoxazole for treatment of chancroid

Chancroid is one of the major causes of genital ulcer disease in developing countries.¹ Sexually transmitted pathogen *Haemophilus ducreyi* is primarily held responsible for it. The ulcers are acute in onset, painful, sometimes highly destructive and often associated with painful, suppurative, inguinal lymphadenopathy.

Randomised double blind studies from different parts of the world (mainly from Asia and Africa) have shown effectiveness of trimethoprim-sulphamethoxazole (TMP-SMZ) or its congeners when given for five to

14 days.²⁻⁴ Plummer *et al*⁵ demonstrated that TMP-SMZ when administered in a single eight tablet dose of 640 mg/3200 mg was convenient, and 96% curative. Other studies particularly from Nairobi using similar preparations in a single dosage have been shown to be effective.^{7,8} The cure rate for chancroid ulcers varied from as low as 30%⁶ to 100%⁸ whereas that for buboes ranged from 67%⁷ to 100%.⁵ However, a study from Thailand² reported a cure rate of only 55% for chancroid ulcer (table).

The present study was carried out to evaluate the efficacy of such single dose therapy in our local population.

Patients with classical chancroid (both

Different single dose trimethoprim sulphonamide combination therapy for chancroid

Location	Antimicrobial	Ulcers (%)			Buboes (%)	
		No. of patients	Cured	Improved	No. of patients	Cured
Nairobi ⁶	Trimethoprim 640 mg + Sulphamethoxazole 3200 mg	10	3 (30%)	6 (60%)	—	—
Nairobi ⁵	Trimethoprim 640 mg + Sulphamethoxazole 3200 mg	25	24 (96%)	—	11	11 (100%)
Nairobi ⁷	Trimethoprim 640 mg + Sulphamethoxazole 3200 mg	27	21 (78%)	—	9	6 (67%)
Nairobi ⁸	Trimethoprim 640 mg + Sulphamethoxazole 3200 mg	27	27 (100%)	—	6	5 (83%)
Bangkok ² , Thailand	Trimethoprim 640 mg + Sulphamethoxazole 3200 mg	31	17 (55%)	—	—	—
Present study	Trimethoprim 960 mg + Sulphamethoxazole 4800 mg	11	2 (18%)	3 (27%)	5	1 (20%)

clinically and supported by Gram stain) were randomly recruited for this study after ruling out concomitant other STDs. Each patient was given 12 single strength trimethoprim (80 mg)—Sulphamethoxazole (400 mg) tablets under direct supervision and patients were asked to return on the fourth and seventh post treatment days for follow-up. We chose to give 50% higher dose in the hope of obtaining better results because of low cure rates with eight such tablets (TMP640 mg + SMZ3200 mg). Patients were prohibited sexual intercourse till complete healing of ulcer. Patients with positive HIV or syphilis serology were excluded.

Patients were considered "cured" if ulcer epithelialization was complete or almost complete and bubo almost subsided—whereas if ulcers or buboes became nontender and decreased at least 50% in size were designated as "improved" at the end of seven days. If on the fourth day there was no improvement, the patients were switched to other modes of therapy.

There were 13 men with classical chancroid. Eleven of them attended for follow up. Five of them had buboes, either unilateral (four) or bilateral (one) in distribution. No patient had more than three ulcers. The individual size of the ulcer ranged from 1.5 cm to 4 cm in diameter whereas the size of buboes varied between 3 to 5 cm in diameter. Of 11 patients who completed the study two were cured, three improved and six failed to show any response. Only one patient with a unilateral bubo improved and the other four did not respond to treatment. All patients tolerated the drug very well.

Sulphonamides have been widely used in the treatment of chancroid. When effective they are ideal for use because of very low cost, easy availability and generally good tolerance.¹⁰ By the 1980s, however, a significant number of treatment failures were noticed in patients with chancroid who received sulfonamides alone.^{3,6,11} Plasmid mediated resistance was found to be responsible for this failure.^{3,6} Trimethoprim (a folic acid antagonist) alone initially was also found to be an effective antimicrobial in the treatment of chancroid⁵ and a cure rate up to 93% was reported.¹¹ The combination of trimethoprim with sulphonamide was expected to circumvent the problem of resistance and clinical trials did show their efficacy when used over a period of three to 14 days^{3,5-7,9} before falling into disrepute.

An ideal method of therapy for any STDs including chancroid is a single dose regimen. The potential efficacy of single dose TMP-SMZ or similar combinations shows a wide

variation.¹²⁻¹⁵ With the emerging resistance against TMP/SMZ for *H. ducreyi* response to single dose therapy with trimethoprim combined with sulphamethoxazole 640 mg/3200 mg fell from a respectable figure of 96%⁵ to 80%¹⁶ subsequently.

In the present study treatment failure rate was found to be 55% for ulcers and 80% for buboes, the figures being high by any standard. Presumably the lack of efficacy is due to greater resistance to trimethoprim and sulfonamides.

We therefore are unable to recommend single dose TMP + SMZ therapy even with higher dose (960 mg + 4800 mg) for the treatment of chancroid.

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